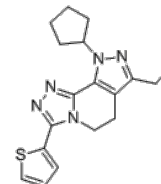


**Product Name** : Tofimilast  
**Cat. No.** : PC-63090  
**CAS No.** : 185954-27-2  
**Molecular Formula** : C<sub>18</sub>H<sub>21</sub>N<sub>5</sub>S  
**Molecular Weight** : 339.461  
**Target** : Phosphodiesterase (PDE)  
**Solubility** : 10 mM in DMSO



## Biological Activity

Tofimilast (CP-325366) is a potent, selective **PDE4** inhibitor with IC<sub>50</sub> of 23, 13 and 13 nM for PDE4A, PDE4B, and PDE4D, respectively.

Tofimilast (CP-325366) shows weakly or no inhibition for PDE4C, and no activity for PDE1, PDE2, PDE3, PDE5, PDE6, and PDE7.

Tofimilast (CP-325366) increases cAMP levels in PGE<sub>1</sub>-stimulated U937 cells with an EC<sub>50</sub> of 230 nM, inhibits human monocyte PDE mediated cAMP catabolism with an IC<sub>50</sub> of 67 nM and LPS stimulated human monocyte TNF $\alpha$  release with an IC<sub>50</sub> of 59 nM.

Tofimilast (CP-325366) shows low oral bioavailability and no emesis-associated behaviors in the ferret emesis model.

## References

Duplantier AJ, et al. *J Med Chem*. 2007 Jan 25;50(2):344-9.

Giembycz MA. *Br J Pharmacol*. 2008 Oct;155(3):288-90.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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